

Landscaping Businesses

Make Clean Water Part of Your Business

Pollutants include pesticides, herbicides, organo-phosphates, sediment



Stormwater runoff from urban landscapes contains many pollutants that can be harmful to human health and the environment. Pesticides, fertilizers and sediments are the most common contaminants that make their way into storm drains as a result of poor landscape practices. The most harmful of these are common ingredients in yard and lawn care products.

Pesticides (including inert ingredients) have been identified as the cause of many human health concerns, including cancer, neurological problems, disruption of hormonal functions, birth defects, and acute poisoning. Children and pets are especially susceptible to the effects of pesticide exposure. All pollutants that enter local waterways are potentially harmful to the environment and threaten the survival of fish, mammals, and aquatic organisms.

Thoughtful design, installation, and maintenance of yards and landscaped areas will reduce the need for chemicals and pesticides, and minimize runoff from yards and landscapes. Adhering to the best management practices below can have a positive impact on human health and the environment.

See the reverse side of this sheet for information about some commonly misunderstood landscaping practices.

Best Management Practices

Evaluating the landscape and understanding where pollution might occur is the first step toward a long-term, healthy solution. Your business and clients can avoid introducing pollutants to our rivers at each stage of a project:

Design

- ☐ Consider all aspects of site conditions (soil type, topography, drainage, etc.) when designing.
- ☐ Choose disease-resistant plants that are appropriate for the site and require less upkeep; use native plants when possible.
- ☐ Do not use invasive plants in the landscape (See City of Eugene *Invasive Species Prohibited Plant List*)
- ☐ Design irrigation systems to minimize runoff from planted areas
- ☐ Minimize lawn areas in the landscape or consider alternatives like ecolawns.
- ☐ Minimize impervious surfaces (pavement) in the design.

Installation

- ☐ Plan installations to minimize erosion; use erosion control measures as needed.
- ☐ Amend soil for optimum growing conditions.
- ☐ Clean up all waste and debris from construction of pathways, decks and fences. Do not wash excess concrete, concrete rinse water, sawdust or any other debris into the driveway or street.

Maintenance

- ☐ Use integrated pest management techniques to control pests.
- ☐ Pull weeds by hand for small weed infestations.
- ☐ Use chemicals only when necessary; strictly follow directions on package.
- ☐ Store chemicals and fertilizers properly.
- ☐ Adjust sprinkler systems to accommodate the landscape as it matures. Water according to needs and adjust watering schedules for wetter and drier periods.
- ☐ Compost yard debris and use as a mulch in planting beds.
- ☐ Raise mower height and leave grass clippings on the lawn.
 Use push mower on smaller lawn areas.
- ☐ Fertilize only as needed; not on a fixed schedule.

Common myths about the use of fertilizers and pesticides:

Pesticides break down and dissolve (disappear) in water.

Pesticides do not break down and disappear when they enter waterways. In fact, they continue to work and can harm or kill aquatic organisms. The Environmental Protection Agency has identified approximately 26 pesticides used in Oregon that have been found to harm fish. Many of these pesticides have been detected at harmful levels in water samples taken from the Willamette River.

Applying twice as much weed and feed kills twice as many weeds!

Follow directions on the package and never apply more than is needed. Excess weed and feed can't dissolve into the lawn and will wash into the street. To save money, only apply weed and feed to areas of the lawn that need it.

Fertilizer only feeds the lawn.

Excess fertilizer that washes into the street ends up in local waterways, where it continues to work causing algae blooms and explosive plant growth. When the algae and plants die and decompose, they use up oxygen needed by fish and aquatic organisms.

I should apply fertilizer or weed and feed just before it rains.

No! Heavy rains wash fertilizer and weed and feed off lawns into the street, making them ineffective.

Pesticides only kill "bad" bugs.

Pesticides kill all bugs, good and bad. Killing bugs that are beneficial to the garden will lead to even greater infestations of bad bugs.

Weed and feed dissolves as soon as I water the lawn.

It may take several waterings before weed and feed pellets completely dissolve into the lawn. Children and pets should not be allowed to play on lawns that have just been treated.

A little bit won't harm the environment.

Even small amounts of pesticide can be very potent. As an example, studies have shown that even very small doses of the pesticide diazinon can destroy the sense of smell in salmon species. Salmon depend on their sense of smell to detect predators and use olfactory cues to migrate to their home streams.

(NOTE: Even though the production of diazinon has stopped, it is still sold in stores until remaining stock is gone.)

Please pass this information along! Your clients will appreciate that you are looking out for the long-term health of our environment. For additional copies of this fact sheet, contact the City of Eugene Stormwater Information Office at 541-682-2739, or visit happyrivers.org.



Need more ideas or information?

Contact the City of Eugene's *Stormwater Information Office* at 541-682-2739 *Emergency Spill Response* (toxic spill)—Eugene-Springfield Fire and EMS: 911 *Pollution Complaints/Stormwater Discharge Violations*—541-682-4800 *Hazardous Waste Disposal*—Lane County Waste Management: 541-682-4120